Title: US-10-560-433-1

Perfect score: 20

Sequence: 1 taacct acct at aagact gg 20

Scoring table: OLIGO_NUC

Gapop 60.0, Gapext 60.0

RESULT 15 AAV78686

XX AC XX

DT

XX DE

XX KW

KW

KW

ID AAV78686 standard; DNA; 305 BP.

AAV78686;

16-MAR-1999 (first entry)

Staphylococcus aureus contig SEQ ID #4375.

Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds.

Staphylococcus aureus.

EP786519-A2.

30- JUL- 1997.

07- JAN- 1997; 97EP- 00100117.

05-JAN-1996; 96US-0009861P.

(HUMA-) HUMAN GENOVE SCI INC.

Kunsch CA, Choi GH, Barash SC, Dillon PJ, Fannon MR, Rosen CA;

WPI; 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus - stored on computer readable medium and used in the production of anti-S. aureus vaccines.

Claim 1; Page 2939; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer readable medium

Untitled Sequence 305 BP; 86 A; 66 C; 86 G; 64 T; 0 U; 3 Other; SQ Query Match Best Local Similarity Score 20; DB 2; Pred. No. 0.024; 100.0% Length 305; 100.0% 0; 0; Mat ches 20; Conservative M smat ches Indels 0; Gaps 0: Qy 1 TAACCTACCTATAAGACTGG 20 76 TAACCTACCTATAAGACTGG 95 Db RESULT 16 AAV78597 ΙD AAV78597 standard; DNA; 337 BP. XX AC XX AAV78597; DT 16-MAR-1999 (first entry) XX DΕ Staphylococcus aureus contig SEQ ID #4286. XX Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; **KW KW** KW skin infection; surgical wound infection; scalded skin syndrome; KW toxic shock syndrome; ds. XX CS Staphylococcus aureus. EP786519-A2. 30-JUL-1997. 07- JAN- 1997; 97EP-00100117. 05-JAN-1996: 96US-0009861P. (HUMA-) HUMAN GENOME SCI INC. Dillon PJ, Kunsch CA, Choi GH, Barash SC. Fannon MR. Rosen CA: WPI; 1997-374922/35. Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-S. aureus vaccines. Claim 1; Page 2903; 3271pp; English. This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock

syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences Page 2

Untitled 888 (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer readable medium Sequence 337 BP; 95 A; 73 C; 93 G; 73 T; 0 U; 3 Other; Score 20; DB 2; Pred. No. 0.024; 100.0% Length 337; Best Local Similarity 100.0% 0; M smat ches Mat ches 20; Conservative Indels Gaps 0: Qy 1 TAACCTACCTATAAGACTGG 20 14 TAACCTACCTATAAGACTGG 33 Db RESULT 20 AAV78473 I D AAV78473 standard; DNA; 400 BP. XX AC XX AAV78473: DT 16-MAR-1999 (first entry) XX DE XX Staphylococcus aureus contig SEQ ID #4162. KW Computer readable medium, vaccine; S. aureus infection; immunodetection; KW KW cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds. Staphylococcus aureus. EP786519-A2. 30-JUL-1997. 07- JAN- 1997; 97EP-00100117. 05-JAN-1996; 96US-0009861P. (HUMA-) HUMAN GENOVE SCI INC. Kunsch CA, Choi GH, Barash SC, Dillon PJ, Rosen CA; Fannon MR, WPI; 1997-374922/35. Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-S. aureus vaccines. Claim 1; Page 2851; 3271pp; English. This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using

the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, Page 3

```
X888888
       skin and surgical wound infections, scalded skin syndrome, toxic shock
       syndrome, etc. Organisms transformed with the DNA sequences can be used
       for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
       readable medium
       Sequence 400 BP; 119 A; 83 C; 92 G; 102 T; 0 U; 4 Other;
                                              Score 20; DB 2;
Pred. No. 0.024;
                                   100.0%
   Query Match
                                                                       Length 400;
                                   100.0%
   Best Local Similarity
                                            0;
                                               M smat ches
   Mat ches
                20; Conservative
                                                                    0;
                                                                        Indels
                                                                                       0:
                                                                                            Gaps
                                                                                                       0:
                1 TAACCTACCTATAAGACTGG 20
Qv
             304 TAACCTACCTATAAGACTGG 323
Db
RESULT 21
AAV77944
I D
       AAV77944 standard; DNA; 400 BP.
XX
AC XX DT XX DE XX KW
       AAV77944;
       16-MAR-1999 (first entry)
       Staphylococcus aureus contig SEQ ID #3633.
       Computer readable medium, vaccine; S. aureus infection; immunodetection;
KW
KW
       cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
       skin infection; surgical wound infection; scalded skin syndrome;
toxic shock syndrome; ds.
       Staphylococcus aureus.
       EP786519- A2.
       30-JUL-1997.
       07- JAN- 1997:
                           97EP-00100117.
       05-JAN-1996;
                           96US-0009861P.
       (HUMA-) HUMAN GENOVE SCI INC.
       Kunsch CA.
                       Choi GH,
                                    Barash SC,
                                                    Dillon PJ,
                                                                    Fannon MR,
                                                                                    Rosen CA:
       WPI; 1997-374922/35.
       Polynucleotide(s) and proteins derived from Staphylococcus aureus -
       stored on computer readable medium and used in the production of anti-
       S. aureus vaccines.
       Claim 1; Page 2619; 3271pp; English.
      This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using the S. aureus DNA sequences allows put at ive functions to be assigned so
       that protein-encoding or regulatory regions of commercial, therapeutic or
       industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
```

Page 4

```
Untitled
      be used in a vaccine composition against S. aureus infection. The
X8888888888
      polypeptides can also be used in a kit for the immunodetection of
      S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used
      for recombinant production of the polypeptides. The new DNA sequences
      (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
      readable medium
      Sequence 400 BP; 120 A; 76 C; 100 G; 102 T; 0 U; 2 Other;
  Query Match
Best Local Similarity
                                             Score 20; DB 2;
Pred. No. 0.024;
                                  100.0%
                                                          DB 2: Length 400:
                                 100.0%
                                          0; M smatches
  Mat ches
               20; Conservative
                                                                  0;
                                                                      I ndel s
                                                                                    0;
                                                                                          Gaps
                                                                                                    0:
Qy
               1 TAACCTACCTATAAGACTGG 20
                   210 TAACCTACCTATAAGACTGG 229
Db
RESULT 22
AAV78113/ c
I D
      AAV78113 standard; DNA; 400 BP.
XX
AC
      AAV78113;
XX
DT
      16-MAR-1999 (first entry)
XX
DE
      Staphylococcus aureus contig SEQ ID #3802.
XX
KW
      Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
skin infection; surgical wound infection; scalded skin syndrome;
      toxic shock syndrome; ds.
      Staphylococcus aureus.
      EP786519- A2.
      30-JUL-1997.
      07- JAN- 1997:
                         97EP-00100117.
      05-JAN-1996;
                          96US-0009861P.
      (HUMA-) HUMAN GENOWE SCI INC.
      Kunsch CA.
                      Choi GH.
                                   Barash SC,
                                                  Dillon PJ,
                                                                  Fannon MR.
                                                                                  Rosen CA:
      WPI; 1997-374922/35.
      Polynucleotide(s) and proteins derived from Staphylococcus aureus -
      stored on computer readable medium and used in the production of anti-
      S. aureus vaccines.
      Claim 1; Page 2695; 3271pp; English.
      This sequence represents one of 5191 Staphylococcus aureus DNA sequences
```

of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using Page 5

```
Untitled
X88888888888888
      the S. aureus DNA sequences allows putative functions to be assigned so
      that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
      be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of
      S. aureus in a sample. S. aureus is implicated in numerous human diseases,
      including cellulitis, eyelid infections, food poisoning, osteomyelitis,
      skin and surgical wound infections, scalded skin syndrome, toxic shock
      syndrome, etc. Organisms transformed with the DNA sequences can be used
      for recombinant production of the polypeptides. The new DNA sequences
      (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
      readable medium
      Sequence 400 BP; 106 A; 84 C; 61 G; 147 T; 0 U; 2 Other;
                                          Score 20; DB 2;
Pred. No. 0.024;
  Query Match
                                100.0%
                                                        DB 2;
                                                                Lenath 400:
  Best Local Similarity
                                100.0%
                                        0; M smatches
                                                              0;
  Mat ches
              20; Conservative
                                                                                              0;
                                                                  Indels
                                                                               0;
                                                                                    Gaps
Qy
                 TAACCTACCTATAAGACTGG 20
                TAACCTACCTATAAGACTGG 67
Db
RESULT 23
AAV77861
I D
      AAV77861 standard; DNA; 400 BP.
XX
AC
      AAV77861;
XX
DT
      16-MAR-1999 (first entry)
XX
DE
      Staphylococcus aureus contig SEQ ID #3550.
XX
KW
      Computer readable medium, vaccine; S. aureus infection; immunodetection;
KW
      cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
skin infection; surgical wound infection; scalded skin syndrome;
      toxic shock syndrome; ds.
      Staphylococcus aureus.
      EP786519- A2.
      30-JUL-1997.
      07-JAN-1997;
                        97EP-00100117.
      05-JAN-1996:
                        96US-0009861P.
      (HUMA-) HUMAN GENOVE SCI INC.
      Kunsch CA,
                     Choi GH,
                                 Barash SC,
                                               Dillon PJ,
                                                              Fannon MR,
                                                                             Rosen CA;
      WPI; 1997-374922/35.
      Polynucleotide(s) and proteins derived from Staphylococcus aureus -
      stored on computer readable medium and used in the production of anti-
      S. aureus vaccines.
```

Claim 1; Page 2580; 3271pp; English.

```
X888888888888888888
       This sequence represents one of 5191 Staphylococcus aureus DNA sequences
       of the invention. The DNA sequences are recorded on a computer readable
       medium, preferably selected from a floppy or hard disk, random access
       memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
       be used in a vaccine composition against S. aureus infection. The
       polypeptides can also be used in a kit for the immunodetection of
       S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
       readable medium
       Sequence 400 BP; 112 A; 85 C; 118 G; 85 T; 0 U; 0 Other;
   Query Match
Best Local Similarity
                                                     Score 20; DB 2;
Pred. No. 0.024;
                                        100.0%
                                                                               Length 400;
                                        100.0%
                                                  0; M smat ches
                                                                              0;
   Mat ches
                  20; Conservative
                                                                                  Indels
                                                                                                   0;
                                                                                                         Gaps
                                                                                                                      0;
                  1 TAACCTACCTATAAGACTGG 20
Qy
                      61 TAACCTACCTATAAGACTGG 80
Db
RESULT 24
AAV78139/ c
I D
       AAV78139 standard; DNA; 400 BP.
XX
AC
XX
DT
       AAV78139;
       16-MAR-1999 (first entry)
XX
DE
XX
       Staphylococcus aureus contig SEQ ID #3828.
KW
       Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
KW
skin infection; surgical wound infection; scalded skin syndrome;
       toxic shock syndrome; ds.
       Staphylococcus aureus.
       EP786519-A2.
       30-JUL-1997.
       07-JAN-1997;
                              97EP-00100117.
       05-JAN-1996;
                              96US-0009861P.
       (HUMA-) HUMAN GENOME SCI INC.
       Kunsch CA,
                          Choi GH,
                                         Barash SC, Dillon PJ,
                                                                              Fannon MR,
                                                                                                Rosen CA;
       WPI; 1997-374922/35.
PT
       Polynucleotide(s) and proteins derived from Staphylococcus aureus -
       stored on computer readable medium and used in the production of anti-
```

Page 7

```
S. aureus vaccines.
Claim 1; Page 2706; 3271pp; English.
        This sequence represents one of 5191 Staphylococcus aureus DNA sequences
        of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using the S. aureus DNA sequences all ows put ative functions to be assigned so
       that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used
        syndrome, etc. Organisms transformed with the DNA sequences can be used
        for recombinant production of the polypeptides. The new DNA sequences
        (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
        readable medium
        Sequence 400 BP; 101 A; 102 C; 78 G; 117 T; 0 U; 2 Other;
                                            100.0%
                                                          Score 20; DB 2; Length 400;
   Best Local Similarity
                                           100.0%
                                                          Pr ed. No. 0.024;
   Mat ches
                    20; Conservative
                                                       0; M smat ches
                                                                                     0;
                                                                                         I ndel s
                                                                                                                   Gaps
                                                                                                                                 0;
Qy
                    1 TAACCTACCTATAAGACTGG 20
                 208 TAACCTACCTATAAGACTGG 189
Db
RESULT 25
AAV78005/c
ΙD
        AAV78005 standard; DNA; 400 BP.
XX
AC
XX
        AAV78005;
DT
        16-MAR-1999 (first entry)
XX
DE
        Staphylococcus aureus contig SEQ ID #3694.
XX
KW
        Computer readable medium vaccine; S. aureus infection; immunodetection;
KW
        cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
KW
        skin infection; surgical wound infection; scalded skin syndrome;
KW
        toxic shock syndrome; ds.
X8XPXPXFXPXPXP
        Staphylococcus aureus.
        EP786519-A2.
        30-JUL-1997.
                                 97EP-00100117.
        07- JAN- 1997;
        05-JAN-1996;
                                 96US-0009861P.
        (HUMA-) HUMAN GENOVE SCI INC.
        Kunsch CA.
                          Choi GH,
                                             Barash SC.
                                                                 Dillon PJ,
                                                                                     Fannon MR.
                                                                                                         Rosen CA:
XX
        WPI; 1997-374922/35.
```

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Polynucleotide(s) and proteins derived from Staphylococcus aureus -
       stored on computer readable medium and used in the production of anti-
       S. aureus vaccines.
       Claim 1; Page 2647; 3271pp; English.
       This sequence represents one of 5191 Staphylococcus aureus DNA sequences
       of the invention. The DNA sequences are recorded on a computer readable
      medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so
      that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The
       polypeptides can also be used in a kit for the immunodetection of
       S. aureus in a sample. S. aureus is implicated in numerous human diseases,
       including cellulitis, eyelid infections, food poisoning, osteomyelitis,
       skin and surgical wound infections, scalded skin syndrome, toxic shock
      syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
       readable medium
       Sequence 400 BP; 102 A; 94 C; 77 G; 126 T; 0 U; 1 Other;
                                               Score 20; DB 2;
Pred. No. 0.024;
                                   100.0%
   Query Match
                                                                      Length 400;
                                   100.0%;
   Best Local Similarity
                                            0; M smatches
   Mat ches
                20; Conservative
                                                                          Indels
                                                                                              Gaps
                                                                                                         0;
                1 TAACCTACCTATAAGACTGG 20
Qy
                  TAACCTACCTATAAGACTGG 147
RESULT 26
AAV77900
ΙD
      AAV77900 standard; DNA; 400 BP.
XX
AC
XX
DT
       AAV77900:
       16-MAR-1999 (first entry)
XX
DE
XX
       Staphylococcus aureus contig SEQ ID #3589.
KW
       Computer readable medium, vaccine; S. aureus infection; immunodetection;
KW
       cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
KW
       skin infection; surgical wound infection; scalded skin syndrome;
KW
      toxic shock syndrome; ds.
XX
\infty
       Staphylococcus aureus.
XX
FH
                            Location/Qualifiers
FTFTFTXXPN
       m sc feature
                            241. . 300
                            / * t ag=
                            /note= "these bases represent a line of missing text in
                            the sequence listing in the specification. They are
                            included to maintain the nucleotide numbering given in
                            the specification for this DNA sequence"
       EP786519- A2.
XX
       30-JUL-1997.
```

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07- JAN- 1997;
                               97EP-00100117.
                                96US-0009861P.
        05-JAN-1996;
        (HUMA-) HUMAN GENOME SCI INC.
        Kunsch CA.
                           Choi GH.
                                           Barash SC,
                                                              Dillon PJ.
                                                                                 Fannon MR.
                                                                                                    Rosen CA:
        WPI; 1997-374922/35.
        Polynucleotide(s) and proteins derived from Staphylococcus aureus -
        stored on computer readable medium and used in the production of anti-
        S. aureus vaccines.
        Claim 1; Page 2599-2600; 3271pp; English.
        This sequence represents one of 5191 Staphylococcus aureus DNA sequences
        of the invention. The DNA sequences are recorded on a computer readable
        medium, preferably selected from a floppy or hard disk, random access
       memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polyperides can
        be used in a vaccine composition against S. aureus infection. The
        polypeptides can also be used in a kit for the immunodetection of
       S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer readable medium.
        readable medium
        Sequence 400 BP; 99 A; 67 C; 97 G; 75 T; 0 U; 62 Other;
                                                       Score 20; DB 2;
Pred. No. 0.024;
   Query Match
Best Local Similarity
                                         100.0%
                                                                                  Length 400;
                                         100.0%
                                                    0; M smat ches
                                                                                 0;
                   20; Conservative
                                                                                                              Gaps
   Mat ches
                                                                                      Indels
                                                                                                        0;
                                                                                                                           0;
Qy
                   1 TAACCTACCTATAAGACTGG 20
                        65 TAACCTACCTATAAGACTCG 84
Db
RESULT 28
AAV75946/ c
I D
        AAV75946 standard; DNA; 579 BP.
XX
AC
        AAV75946;
XX
DT
        16-MAR-1999 (first entry)
XX
DE
        Staphylococcus aureus contig SEQ ID #1635.
XX
KW
        Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
KW
KW
        skin infection; surgical wound infection; scalded skin syndrome;
KW
        toxic shock syndrome; ds.
```

XX

```
Staphylococcus aureus.
       EP786519- A2.
       30-JUL-1997.
       07-JAN-1997;
                             97EP-00100117.
       05-JAN-1996;
                             96US-0009861P.
       (HUMA-) HUMAN GENOME SCI INC.
       Kunsch CA. Choi GH.
                                        Barash SC, Dillon PJ, Fannon MR, Rosen CA;
       WPI; 1997-374922/35.
       Polynucleotide(s) and proteins derived from Staphylococcus aureus -
       stored on computer readable medium and used in the production of anti-
       S. aureus vaccines.
       Claim 1; Page 2018; 3271pp; English.
       This sequence represents one of 5191 Staphylococcus aureus DNA sequences
       of the invention. The DNA sequences are recorded on a computer readable
       medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so
       that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including colludities expected.
       including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock
       syndrome, etc. Organisms transformed with the DNA sequences can be used
       for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
       readable medium
       Sequence 579 BP; 159 A; 120 C; 87 G; 208 T; 0 U; 5 Other;
                                                    Score 20; DB 2; Length 579; Pred. No. 0.024;
   Query Match
                                       100.0%
   Best Local Similarity
                                       100.0%
                                                 0; M smat ches
                                                                                                                   0;
   Mat ches
                 20: Conservative
                                                                                I ndel s
                                                                                                 0;
                                                                                                       Gaps
Qy
                  1 TAACCTACCTATAAGACTGG 20
               145 TAACCTACCTATAAGACTGG 126
Db
RESULT 29
AAV77941
ΙD
       AAV77941 standard; DNA; 589 BP.
XX
AC
XX
DT
       AAV77941;
       16-MAR-1999 (first entry)
XX
       Staphylococcus aureus contig SEQ ID #3630.
DE
XX
KW
       Computer readable medium, vaccine; S. aureus infection; immunodetection;
                                                         Page 11
```

```
Untitled
KW
      cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
ΚW
      skin infection; surgical wound infection; scalded skin syndrome;
KW
      toxic shock syndrome; ds.
Staphylococcus aureus.
      EP786519- A2.
      30- JUL- 1997.
      07-JAN-1997;
                         97EP-00100117.
      05-JAN-1996;
                          96US-0009861P.
      (HUMA-) HUMAN GENOVE SCI INC.
      Kunsch CA,
                     Choi GH,
                                   Barash SC,
                                                 Dillon PJ,
                                                                 Fannon MR,
                                                                                 Rosen CA:
      WPI: 1997-374922/35.
      Polynucleotide(s) and proteins derived from Staphylococcus aureus -
      stored on computer readable medium and used in the production of anti-
      S. aureus vaccines.
      Claim 1; Page 2618; 3271pp; English.
      This sequence represents one of 5191 Staphylococcus aureus DNA sequences
      of the invention. The DNA sequences are recorded on a computer readable
      medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using the S. aureus DNA sequences allows putative of communications to be assigned so
      that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
      be used in a vaccine composition against S. aureus infection. The
      polypeptides can also be used in a kit for the immunodetection of
      S. aureus in a sample. S. aureus is implicated in numerous human diseases,
      including cellulitis, eyelid infections, food poisoning, osteomyelitis,
      skin and surgical wound infections, scalded skin syndrome, toxic shock
      syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences
      (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
      readable medium
      Sequence 589 BP; 208 A; 86 C; 115 G; 175 T; 0 U; 5 Other;
                                             Score 20; DB 2;
Pred. No. 0.024;
  Query Match
Best Local Similarity
                                 100.0%
                                                          DB 2; Length 589;
                                 100.0%;
                                          0; M smatches
               20; Conservative
  Mat ches
                                                                     Indels
                                                                                    0:
                                                                                         Gaps
                                                                                                   0:
               1 TAACCTACCTATAAGACTGG 20
Qy
                   Db
             421 TAACCTACCTATAAGACTGG 440
RESULT 31
AAV77850
ΙD
      AAV77850 standard; DNA; 1171 BP.
```

XX AC

XX DT

XX

AAV77850;

16-MAR-1999 (first entry)

Staphylococcus aureus contig SEQ ID #3539.

Computer readable medium, vaccine; S. aureus infection; immunodetection; celiulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds.

Staphylococcus aureus.

Key Location/Qualifiers

misc_f eat ur e 661. . 720 /*t ag= a

/*tag= a /note= "these bases represent a line of missing text in the sequence listing in the specification. They are included to maintain the nucleotide numbering given in the specification for this DNA sequence"

EP786519-A2.

XX KW

KW

KW KW

XX S XX

FΗ

FT

30- JUL- 1997.

07- JAN- 1997; 97EP- 00100117.

05- JAN- 1996; 96US- 0009861P.

(HUMA-) HUMAN GENOVE SCI INC.

Kunsch CA, Choi CH, Barash SC, Dillon PJ, Fannon MR, Rosen CA;

WPI; 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus - stored on computer readable medium and used in the production of anti-S. aureus vaccines.

Claim 1; Page 2574-2575; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer readable medium

Sequence 1171 BP; 288 A; 241 C; 282 G; 300 T; 0 U; 60 Other;

Query Match 100.0% Score 20; DB 2; Length 1171; Best Local Similarity 100.0% Pred. No. 0.023; Matches 20; Conservative 0; M smatches 0; Indels 0; Caps 0;

1121 TAACCTACCTATAAGACTGG 1140

Db

XX

XX

DE

XX KW

KW KW

KW XX S

RESULT 32 AAV77505

ID AAV77505 standard; DNA; 1290 BP.

AC AAV77505;

DT 16-MAR-1999 (first entry)

Staphylococcus aureus contig SEQ ID #3194.

Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds.

Staphylococcus aureus.

Key Location/Qualifiers

m sc_f eat ur e 901. . 960

/*tag=a

/note= "these bases represent a line of missing text in the sequence listing in the specification. They are included to maintain the nucleotide numbering given in the specification for this DNA sequence"

EP786519-A2.

30-JUL-1997.

07- JAN- 1997; 97EP- 00100117.

05- JAN- 1996; 96US- 0009861P.

(HUMA-) HUMAN GENOVE SCI INC.

Kunsch CA. Choi GH. Barash SC. Dillon PJ. Fannon MR. Rosen CA:

WPI; 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus - stored on computer readable medium and used in the production of anti-S. aureus vaccines.

Claim 1; Page 2479-2480; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, preferably selected from a floppy or hard disk, random access memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used